

Title (en)
Current sensing in a two-phase motor

Title (de)
Stromföhlung in einem Zweiphasenmotor

Title (fr)
Détection de courant dans un moteur biphasé

Publication
EP 1617555 A2 20060118 (EN)

Application
EP 05254355 A 20050712

Priority
US 88949004 A 20040712

Abstract (en)
A method and apparatus for measuring current by a single sensor for two motor phases driven by first and second set of switches to drive respective first and second phases of a motor under control of PWM signals. A first step 100 includes reading a duty cycle of each winding drive current. A next step configures 104, 110, 114, 116, 118 the PWM signals to provide at least one timing window wherein at least one of the windings of the motor is being driven while the other winding is not being driven, and to provide a relative timing offset of approximately one-half cycle between the pulse width modulation signals driving a first winding and a second winding of the motor. A next step 90 includes gating the switches with the configured PWM signals. A next step 95 includes sampling the current of the at least one of the windings with a single sensor.

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CPC (source: EP US)
H02P 7/282 (2013.01 - EP US); **H02M 1/0009** (2021.05 - EP US); **H02M 7/5395** (2013.01 - EP US)

Citation (applicant)
US 5656910 A 19970812 - ERCKERT RICARDO [DE]

Cited by
WO2008055741A1; KR20150013150A; CN103620943A; WO2012107325A1; WO2013000632A3; US8421394B2

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